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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,919	01/30/2004	Tadashi Ohashi	826.1918	3947
21171	7590	10/31/2008		
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER COUGHLAN, PETER D	
			ART UNIT	PAPER NUMBER
			2129	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/766,919

Applicant(s)

OHASHI, TADASHI

Examiner

PETER COUGHLAN

Art Unit

2129

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

Detailed Action

1. This office action is in response to an **AMENDMENT** entered August 21, 2008 for the patent application 10/766919 filed on January 30, 2004.
2. All previous office actions are fully incorporated into this Final Office Action by reference.
3. Examiner's Comment: Although, the terms 'carrier wave' or 'carrier signal' is not specifically mentioned within the specification, the Examiner will exclude these interpretations wherein the context of 'media' is disclosed.

Status of Claims

4. Claims 1-15, 22, 23 are pending.

35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 6-10, 22, 23 are rejected under 35 U.S.C. 101 for nonstatutory subject matter. The computer system must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77. The invention is ineligible because it has not been limited to a substantial practical application. The generation a knowledge structure based upon a superclass has no practical application. The result has to be a practical application.

In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible and concrete." If the claim is directed to a practical application of the § 101 judicial exception producing a result tied to the physical world that does not preempt the judicial exception, then the claim meets the statutory requirement of 35 U.S.C. § 101. The phrase 'generation a knowledge structure based upon a superclass', is not clear in its purpose or scope. There has to be a real world practical application.

The invention must be for a practical application and either:

- 1) specify transforming (physical thing) or
- 2) have the FINAL RESULT (not the steps) achieve or produce a useful (specific, substantial, AND credible), concrete (substantially repeatable/ non-unpredictable), AND tangible (real world/ non-abstract) result.

A claim that is so broad that it reads on both statutory and non-statutory subject matter, must be amended.

A claim that recites a method that recites the generation of a knowledge structure based upon a superclass has no real world practical application. There must be a result that is a practical application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-6, 8-11, 13-15, 22 and 23 are rejected under 35 U.S.C. 102(b) (hereinafter referred to as **Glebov**) being anticipated by Glebov et al., U.S. 6343265.

Claim 1

Glebov teaches a computer readable medium encoded with a program that when executed causes a computer to generate a knowledge structure based on classes of knowledge and relationships between the knowledge classes, according to operations comprising: storing in a database classes of knowledge for generation of the knowledge structure (**Glebov**, C3:66 through C4:18; The storing of database classes of applicant is accomplished by the 'memory' of Glebov.); searching the classes of knowledge for a

super class having a name inclusively describing a broader target concept of a knowledge structure to be generated (**Glebov**, C1:47-55; Searching for classes with a broader target concept of applicant is disclosed by a general object oriented concept of inheritance; Thus is 'A' inherits from 'B' then 'B' is a superclass of 'A' and 'A' is a subclass of 'B' of Glebov.); generating a relationship between the classes of knowledge by inferring based on multivalued logic (**Glebov**, C1:47-55; 'Generating a relationship' of applicant is disclosed by 'when 'A' inherits from 'B' of Glebov. 'Multivalued logic' of applicant is disclosed by how the properties of one class can be inherited into another class); generating the knowledge structure based upon the superclass, the detected super class related classes on knowledge and the relationships between the classes of knowledge (**Glebov**, C1:47-55; 'Superclass' of applicant is equivalent to 'superclass' of Glebov.); and outputting the generated knowledge structure describing the broader target concept. (**Glebov**, C2:48-61; 'Outputting the generated knowledge structure' of applicant is equivalent to 'displays the results of the mapping design' of Glebov.)

Claim 3

Glebov teaches wherein said relationship inferring a new knowledge class is generated when the new knowledge class can be generated to associate the knowledge classes by the inference, and is associated with another knowledge class so that the knowledge structure can be generated. (**Glebov**, C1:47-55; 'New knowledge class' of applicant is disclosed by the generation of the 'superclass' of Glebov.)

Claim 4

Glebov teaches wherein in said relationship inferring, a temporal inference on a group of the knowledge classes is conducted based upon a description of the knowledge classes and a relationship between the knowledge classes in the generated knowledge structure. (**Glebov**, C2:48-61; 'Temporal inference' of applicant is disclosed by the example of 'properties for the class car' of Glebov.)

Claim 5

Glebov teaches wherein on a part of a user who uses the generated knowledge structure, the knowledge structure is restructured by an inference using multivalued logic according to information about another super class describing the broader target concept of the knowledge structure. (**Glebov**, C5:24-30; 'User who uses the generated knowledge structure' of applicant is illustrated by 'the user controls the OO modeling tool and application development tool' of Glebov.)

Claim 6

Glebov teaches storing in a database classes of knowledge for generation of a knowledge structure(**Glebov**, C3:66 through C4:18; The storing of database classes of applicant is accomplished by the 'memory' of Glebov.); searching the classes of knowledge for a super class having a name inclusively describing a broader target concept of a knowledge structure to be generated (**Glebov**, C1:47-55; Searching for classes with a broader target concept of applicant is disclosed by a general object

oriented concept of inheritance; Thus is 'A' inherits from 'B' then 'B' is a superclass of 'A' and 'A' is a subclass of 'B' of Glebov.); generating a relationship between the classes of knowledge by inferring based on multivalued logic (**Glebov**, C1:47-55; 'Generating a relationship' of applicant is disclosed by 'when 'A' inherits from 'B' of Glebov. 'Multivalued logic' of applicant is disclosed by how the properties of one class can be inherited into another class); generating the knowledge structure based upon the super class, the detected super class related classes of knowledge and the relationships between the classes of knowledge (**Glebov**, C1:47-55; 'Superclass' of applicant is equivalent to 'superclass' of Glebov.); and outputting the generated knowledge structure describing the broader target concept. (**Glebov**, C2:48-61; 'Outputting the generated knowledge structure' of applicant is equivalent to 'displays the results of the mapping design' of Glebov.)

Claim 8

Glebov teaches wherein in said relationship inferring a new knowledge class is generated when the new knowledge class can be generated to associate the knowledge classes by the inference, and is associated with another knowledge class so that the knowledge structure can be generated. (**Glebov**, C1:47-55; 'New knowledge class' of applicant is disclosed by the generation of the 'superclass' of Glebov.)

Claim 9

Glebov teaches wherein in said relationship inferring, a temporal inference on a group of knowledge classes is conducted based upon a description of the knowledge classes and a relationship between the knowledge classes changing over time is included in the generated knowledge structure. (**Glebov**, C2:48-61; 'Temporal inference' of applicant is disclosed by the example of 'properties for the class car' of Glebov.)

Claim 10

Glebov teaches wherein on a part of a user who uses the generated knowledge structure, the knowledge structure is restructured by an inference using multivalued logic according to information about another super class describing the broader target concept of the knowledge structure. (**Glebov**, C5:24-30; 'User who uses the generated knowledge structure' of applicant is illustrated by 'the user controls the OO modeling tool and application development tool' of Glebov.)

Claim 11

Glebov teaches a computer readable storage unit storing in a database classes of knowledge for generation of a knowledge structure; (**Glebov**, C3:66 through C4:18; The storing of database classes of applicant is accomplished by the 'memory' of Glebov.) and a computer controller executing searching the classes of knowledge for a super class stored having a name inclusively describing a broader target concept of a knowledge structure to be generated (**Glebov**, C1:47-55; Searching for classes with a

broader target concept of applicant is disclosed by a general object oriented concept of inheritance; Thus is 'A' inherits from 'B' then 'B' is a superclass of 'A' and 'A' is a subclass of 'B' of Glebov.); generating a relationship between the classes of knowledge by inferring based on multivalued logic (**Glebov**, C1:47-55; 'Generating a relationship' of applicant is disclosed by 'when 'A' inherits from 'B' of Glebov. 'Multivalued logic' of applicant is disclosed by how the properties of one class can be inherited into another class); generating the knowledge structure based upon the super class, the detected super-class related classes of knowledge and the relationships between the classes of knowledge (**Glebov**, C1:47-55; 'Superclass' of applicant is equivalent to 'superclass' of Glebov.); and outputting the generated knowledge structure describing the broader target concept. (**Glebov**, C2:48-61; 'Outputting the generated knowledge structure' of applicant is equivalent to 'displays the results of the mapping design' of Glebov.)

Claim 13

Glebov teaches wherein in the relationship inferring, a new knowledge class is generated when the new knowledge class can be generated to associate the knowledge classes by the inference, and is associated with another knowledge class so that the knowledge structure can be generated. (**Glebov**, C1:47-55; 'New knowledge class' of applicant is disclosed by the generation of the 'superclass' of Glebov.)

Claim 14

Glebov teaches wherein in the relationship inferring, a temporal inference on a group of the knowledge classes is conducted based upon a description of the knowledge classes and a relationship between knowledge classes changing over time s included in the generated knowledge structure. (**Glebov**, C2:48-61; 'Temporal inference' of applicant is disclosed by the example of 'properties for the class car' of Glebov.)

Claim 15

Glebov teaches wherein on a part of a user who uses the knowledge structure, the knowledge structure is restructured by an inference using multivalued logic according to information about another super class describing the broader target concept of the knowledge structure. (**Glebov**, C5:24-30; 'User who uses the generated knowledge structure' of applicant is illustrated by 'the user controls the OO modeling tool and application development tool' of Glebov.)

Claim 22

Glebov teaches wherein each class of knowledge includes property information, based upon which the relationship between the classes by knowledge by inferring based on multivalued logic is generated. (**Glebov**, C7:24-54; 'Property information' of applicant is disclosed by 'attribute values' of Glebov.)

Claim 23

Glebov teaches wherein the classes of knowledge are according to a universal modeling language (UML). (**Glebov**, abstract; 'UML' of applicant is equivalent to 'UML' of Glebov.)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glebov as set forth above, in view of Smialek. (U. S. Patent Publication 20020161777, referred to as **Smialek**.)

Claims 2, 7 and 12

Glebov does not teach wherein the relationship between the classes of knowledge includes a weight which weighs the relationship.

Smialek teaches wherein the relationship between the classes of knowledge includes a weight which weighs the relationship. (**Smialek**, ¶0028; 'Relationship between the classes' of applicant is disclosed by 'classes of software objects and the constraints placed on their connections' of Smialek.) It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the teachings of Glebov by using weights between classes as taught by Smialek to have wherein the relationship between the classes of knowledge includes a weight which weighs the relationship.

For the purpose of building a model in which different attributes can have a different importance related to them.

Response to Arguments

6. Applicant's arguments filed on August 21, 2008 for claims 1-15, 22, and 23 have been fully considered but are not persuasive.

6. In reference to the Applicant's argument:

REMARKS

STATUS OF THE CLAIMS

Claims 1-20 are rejected under 35 U.S.C. 101 for nonstatutory subject matter.
Claims 4, 9, 14 and 19 are rejected under 35 U.S.C. § 101 for preemption.

Claims 2, 3, 4, 7, 8, 12, 13, 14, 17, and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Claims 1, 6, 11, 16, and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

Claims 4, 9, 14, and 19 are rejected under 35 USC 112, 2nd paragraph, for indefiniteness, and the claims are amended taking into consideration the Examiner comments. Withdrawal of the rejection is requested.

Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen (U.S. Patent No. 6,832,214).

The claims are amended and added, and, thus, the pending claims remain for reconsideration, which is requested. No new matter has been added.

Regarding the 35 USC 101, statutory subject matter rejection, the claims are amended to recite to practical application of = generating the knowledge structure based upon the super class, the detected super-class related classes of knowledge, and the relationships between the classes of knowledge; and outputting the generated knowledge structure describing the broader target concept," namely the invention is generation of a knowledge structure based upon "generating a relationship between the classes of knowledge by an inference based on multivalued logic ... and outputting the generated knowledge structure describing the broader target concept." Withdrawal of this rejection is requested.

Regarding the 35 USC 101, preemption rejection, these claims are amended for clarity. Withdrawal of the rejection is requested.

Examiner's response:

There remains no practical application for claims 6-10, 22, 23. Office Action stands.

7. In reference to the Applicant's argument:

Regarding the 35 USC 112, 1st paragraph, written description requirement rejection, the claims are amended along the lines the original claims and for clarity based upon the specification page 7, line 23 to page 9, line 18. Withdrawal of the rejection is requested.

Regarding the claim 4 language wherein the relationship between the classes of knowledge includes a weight which weights a the relationship," the claim language has been amended to retain the original claim language and it is submitted any weight can

be applied as desired by one skilled in the art. The invention adds a "weight" to the relationship. Further, the specification page 12, line 11 to page 13, line 16 (page 14, lines 15-16) and page 14, line 4 to page 15, line 19 expressly describes an example of weight assignment and page 21, lines 14-19 expressly discusses use of weights to highlight from among the generated relationship the more valid relationships in relation to other relationships. Page 13, lines 15-16, expressly discuss that a weight can be inferred by multivalued logic (fuzzy logic, etc.), and the Response to Arguments asserts the accepted term of 'weight' has nothing to do with fuzzy logic. However, general definition of fuzzy logic implies that one skilled in the art knows that in fuzzy logic is used for reasoning and a degree of truth of a statement can have a range, namely the inventive concept uses the fuzzy logic to assign a weight to an associated relationship to highlight reliability to the user. It is readily apparent the rejection is not appropriate and withdrawal of the written description requirement is requested.

Regarding the 35 USC 112, 1st paragraph, enablement rejection of claims 1, 6, and 11, the language "generating a relationship between the classes of knowledge by an inference based on multivalued logic," provides that classes of knowledge are related based upon an inference that is established based upon multivalued logic. It is submitted one skilled in the art knows how to implement generation of such relationships based upon the descriptions in FIG. 2 and the specification page 12, line 11 to page 13, line 16, namely the function of processing a weighted relationship (three relationship elements of dependence, generalization, and relationship)'is assigned, and the weight can be inferred by multivalued logic, namely fuzzy logic, generic logic, or etc. Page 14, lines 6-20 expressly describes an example of such relationship generation. In other words, a relationship is generated based upon dependence, generalization, and relationship elements, and the weight of the relationship is inferred by computing a weight of the relationship using a multivalued logic of fuzzy logic and/or generic logic. The Office Action page 7, item (H) asserts how fuzzy logic can be used to generate a relationship, however, the specification, for example, page 13, lines 15-16, expressly discuss that a weight can be inferred by multivalued logic (fuzzy logic, etc.). Withdrawal of the enablement rejection is requested.

Examiner's response:

All cited claims were amended to overcome 35 U.S.C. §112 1st paragraph rejections. The Examiner withdraws the rejections.

8. In reference to the Applicant's argument:

Regarding the rejection under §102, it is traversed as follows:

Nguyen merely discloses generating a program with a neural network. Cited document Nguyen fails to disclose expressly or inherently (by failing to necessarily require) generating a knowledge structure based upon "generating a relationship between the classes of knowledge by an inference based on multivalued logic ... and outputting the generated knowledge structure describing the broader target concept." In other words, Nguyen fails to disclose expressly or inherently the claimed invention as supported by the configurations in Figs. 2, 3, 6, 10 and 11 and descriptions thereof. So in Nguyen, a program is generated with a neural network, while the claimed invention generates a knowledge structure for a target concept, for example, a component of a product (i.e., all products including hardware products) by inference. According to the inventor Applicant the claimed present invention is totally different from Nguyen.

Benefit not obtained from the invention of Nguyen

The present invention discloses a device that has a benefit of universally handling a modeling language (UML), namely "storing in a database classes of knowledge for ,generation of, the knowledge structure," and that can automatically build a knowledge structure for any target concept, for example, a product, workflows, components of a product, etc.

New claim 23 is allowable by reciting =23. (NEW) The method according to claim 22, wherein the classes of knowledge are according to a universal modeling language (UML).°

Nguyen does not expressly or inherently contemplate this, so Nguyen cannot anticipate the claims.

Why such an effect can be obtained from the configuration of the present invention

As is readily apparent from the embodiment of the present invention described in the Specification, in the present invention, a relationship between knowledge classes can be inferred from the information (property) of the knowledge classes shown in Fig. 6. This enables the automatic generation of a relationship between the knowledge classes. Nguyen fails to disclose expressly or inherently a function such as the one in Fig. 6.

New dependent claim 22 is allowable, because it recites "22. (NEW) The method according to claim 6, wherein each class of knowledge includes property information, based upon which the relationship between the classes of knowledge by inferring based on multivalued logic is generated."

Thus, a prima facie case of anticipation based upon Nguyen cannot be established, because Nguyen fails to disclose expressly or inherently a method of generating a

knowledge structure based upon "generating a relationship between the classes of knowledge by an inference based on multivalued logic ... and outputting the generated knowledge structure describing the broader target concept." Nguyen merely discloses generating a program, which does not necessarily require or inherently disclose generation of a knowledge structure for a target concept, for example, a product, workflows, components of a product, etc., based upon knowledge classes as claimed.

Allowance of independent claims 1, 6, and 11 is requested.

Allowance of dependent claims 22 and 23 is requested.

Examiner's response:

Nguyen is no longer used as a reference. Glebov is used as a reference for the amended claims. The storing of database classes of applicant is accomplished by the 'memory' of Glebov. (**Glebov**, C3:66 through C4:18) Searching for classes with a broader target concept of applicant is disclosed by a general object oriented concept of inheritance; Thus is 'A' inherits from 'B' then 'B' is a superclass of 'A' and 'A' is a subclass of 'B' of Glebov. (**Glebov**, C1:47-55) 'Generating a relationship' of applicant is disclosed by 'when 'A' inherits from 'B' of Glebov. 'Multivalued logic' of applicant is disclosed by how the properties of one class can be inherited into another class (**Glebov**, C1:47-55) 'Superclass' of applicant is equivalent to 'superclass' of Glebov. (**Glebov**, C1:47-55) 'Outputting the generated knowledge structure' of applicant is equivalent to 'displays the results of the mapping design' of Glebov. (**Glebov**, C2:48-61) Office Action stands.

Examination Considerations

9. The claims and only the claims form the metes and bounds of the invention.

"Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has the full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

10. Examiner's Notes are provided to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and sprit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but link to prior art that one of ordinary skill in the art would find inherently appropriate.

11. Examiner's Opinion: Paragraphs 9 and 10 apply. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. Claims 1-15, 22, 23 are rejected.

Correspondence Information

14. Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner Peter Coughlan, whose telephone number is (571) 272-5990. The Examiner can be reached on Monday through Friday from 7:15 a.m. to 3:45 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor David Vincent can be reached at (571) 272-3080. Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,
Washington, D. C. 20231;

Hand delivered to:

Receptionist,
Customer Service Window,
Randolph Building,
401 Dulany Street,
Alexandria, Virginia 22313,

(located on the first floor of the south side of the Randolph Building);

or faxed to:

(571) 272-3150 (for formal communications intended for entry.)

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions

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on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

/P. C./

Examiner, Art Unit 2129

Peter Coughlan

10/29/2008

/David R Vincent/

Supervisory Patent Examiner, Art Unit 2129